

continue to develop along with the production of perithecia, though in older spots the production of conidia diminishes until finally a diseased area shows little but ripe perithecia, very few conidia and very little of the mycelium remaining.

The growth of the mildew on greenhouse plants started in all the cases observed on the upper surface of the leaves, the mycelia appearing later on under the surface. None of the younger spots on the under surface of the leaves were independent of the mildew on the upper surface; it was always possible in the spots examined to trace the mycelium connecting the areas of mildew on both upper and lower leaf surfaces. Between November and May the mildew grew most abundantly on the upper surfaces of the leaves and in many cases during December, January and February there was no growth of mildew on the under surfaces of the leaves. In May and June there was abundant growth on both sides of the leaves, but after this period the mildew grew most abundantly on the under leaf surfaces producing no ascocarps on the upper parts.

For classes in mycology *Sphaerotheca* should prove to be a very desirable type, since one may plan to have it in vigorous growing condition for study at any specified time of the year. From the time of sowing the seed of the host plant to the time when ripe perithecia may be produced varies from five to eight weeks according to conditions.

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## BOOK REVIEW

### SCHAFFNER'S FIELD MANUAL OF TREES\*

Another book to add to the many reflecting the present interest in nature study and helping increase such interest, this little manual is both convenient and very usable. There are keys to the trees in the summer condition based chiefly on leaves; in the winter condition based on twigs and buds; to the fruits and a general key based on both leaf and flower characters. The last key seems unnecessary. The keys are simple and easily followed through to the genera. Under these are keys to the

\* John H. Schaffner, *Field Manual of Trees*, 3rd Edition, 154 pp., R. G. Adams and Co. Columbus, Ohio, 1926. \$1.50.

species where more than one is described. There is a brief account of each species giving the general characters, habitat, distribution, and the character and uses of the wood. All of the native trees of the Northeastern United States and most of these commonly cultivated for ornament or fruit are included. The nomenclature is that of the second edition of Britton and Brown. A single common name is given for each species, though a few others are to be found in the index. The use of synonyms and of several common names would have added to the value of the book, especially where a tree is known by different names in different regions. There is a glossary and a complete index. The introduction attempts in six pages to give an outline of all the activities of the growing tree from the absorption of water to the development of seed. The book easily fits in the coat pocket. It is well bound in semi-flexible dark blue cloth and printed on good quality paper. It will be helpful to all who wish to know the trees, especially as it can be used at all seasons of the year.

GEORGE T. HASTINGS.

## PROCEEDINGS OF THE CLUB

MINUTES OF THE MEETING OF APRIL 28, 1926

This meeting was held at the Museum Building of the New York Botanical Garden with Vice President Barnhart in the Chair. The following were elected to membership in the Club:

Prof. Oakes Ames, North Easton, Mass.

Mr. E. J. Schreiner, New York Botanical Garden.

Mr. F. A. Varrelman, American University Campus, Washington, D. C.

Mrs. Britton read a part of a communication from the Committee on the Preservation of Natural Conditions of the Ecological Society of America, in which it was suggested that the societies affiliated with it contribute \$1.00 to pay for the correspondence involved in circularizing matters relating to the preservation of natural features in the United States. By vote of the Club this sum was appropriated.

The scientific part of the program consisted of a talk by Dr. Arthur Hollick entitled "Recent discoveries of fossil plants